CLAIMS

1. A media handling system for handling sheets of media, comprising:

a pick roller structure having a circumferential media-contacting surface and arranged for rotation about a roller axis to contact and pick a sheet from an input source;

a drive roller structure arranged for rotation about a drive roller axis;

a media path extending between the pick roller structure and the drive roller structure;

a first guide structure positioned along a first longitudinal edge of the media path and providing a first media guide surface;

a second guide structure positioned along a second longitudinal edge of the media path and providing a second media guide surface;

wherein the first and second guide surfaces are positioned to constrain the movement of a media sheet at a location in the media path between the pick roller structure and the drive roller structure, thereby reducing trailing edge print defects.

2. The system of Claim 1 wherein the media path portion between the first guide structure and the second guide structure has a media entrance adjacent the pick roller structure and a media exit adjacent the drive roller structure, and wherein the width of the media path portion is greater at the media exit than at the media entrance.

3. The system of Claim 2 wherein the media path portion tapers gradually from the media entrance to the media exit.

4. The system of Claim 1 wherein a spacing between the first guide surface and the second guide surface is in the range between .5 mm and 5 mm.

5. The system of Claim 1 wherein the pick roller structure includes a plurality of spaced pick roller wheels, and wherein a corresponding plurality of pinch wheels are arranged to create nips between respective pick roller wheels and pinch wheels, and wherein the second guide structure is arranged to constrain a sheet of print media at regions between the nips, thereby reducing deformation of the print medium due to stresses exerted on the print medium at the nips.

6. The system of Claim 5 wherein a spacing between the first guide structure and the second guide structure at said nips is in the range of .5 mm to 2 mm.

7. An inkjet printer with improved media control to reduce trailing edge print defects, comprising:

an input tray for holding a stack of sheets of print media;

an output tray for receiving output sheets of media subsequent to printing operations;

a media path extending between the input tray and the output tray;

a pick roller structure disposed on the media path having a circumferential media-contacting surface and arranged for rotation about a roller axis to advance a sheet along the media path from the input tray;

a pick pinch roller structure arranged relative to the pick roller structure to define a pinch nip therebetween;

a drive roller structure disposed on the media path downstream of the pick roller structure and arranged for rotation about a drive roller axis;

a drive pinch roller structure arranged relative to the drive roller structure to define a drive nip therebetween;

a first guide structure positioned along a first longitudinal edge of the media path between the pick roller structure and the drive roller structure and providing a first media guide surface;

a second guide structure positioned along a second longitudinal edge of the media path between the pick roller structure and the drive roller structure and providing a second media guide surface;

wherein the first and second guide surfaces are positioned to constrain the movement of a media sheet in a portion of the media path between the pick roller structure and the drive roller structure, thereby reducing trailing edge print defects.

8. The printer of Claim 7 wherein the media path portion between the first guide structure and the second guide structure has a media entrance adjacent the pick roller structure and a media exit adjacent the drive roller structure, and wherein the width of the media path portion is greater at the media exit than at the media entrance.

9. The printer of Claim 8 wherein the media path portion tapers gradually from the media entrance to the media exit.

10. The printer of Claim 7 wherein a spacing between the first guide surface and the second guide surface is in the range between .5 mm and 5 mm.

11. The printer of Claim 7 wherein the pick roller structure includes a plurality of spaced pick roller wheels, said pick pinch roller structure includes a corresponding plurality of pinch wheels are arranged to create a plurality of pick nips between respective pick roller wheels and pinch wheels, and wherein the second guide structure is arranged to constrain a sheet of print media at regions between the plurality of pick nips, thereby reducing deformation of the print medium due to stresses exerted on the print medium at the nips.

12. The printer of Claim 11 wherein a spacing between the first guide structure and the second guide structure at said plurality of pick nips is in the range of .5 mm to 2 mm.

13. The printer of Claim 11 wherein the media path portion between the first guide structure and the second guide structure has a media entrance adjacent the pick roller structure and a media exit adjacent the drive roller structure, and wherein the width of the media path portion is greater at the media exit than at the media entrance.

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